

## ABSTRACT

A method of removing a photoresist layer from an integrated circuit (IC) structure having an etched dielectric material with an exposed barrier layer that covers a copper interconnect. The barrier layer is composed of a material such as silicon  
5 nitride or silicon carbide. The method includes feeding a gas mixture that compromises carbon monoxide (CO) into a reactor. A plasma is then generated within the reactor. The photoresist layer is then selectively removed with little or no etching of the exposed barrier layer.